Mars life

SCRIPT:

Not long ago, a scientist in Antarctica found a rock from Mars that looked like it might contain the fossil of a micro-organism.

As for how it got here, our best guess is that an asteroid crashed into Mars, and blasted some rocks into space. Eventually, some of them landed on Earth.

But why would there be any life inside a rock that was buried on Mars..?

Well, scientists just discovered half of all the life on Earth may be buried underground, even in the rocks. In other words, we just discovered there's twice as much life on Earth as we thought there was... and we didn't know it because it's all been living inside the earth. All of them are microbes – too small to see without a microscope.

Even when we drill two miles underground, we now find the Earth is full of these micro-organisms. Right now, we don't know much about them, or what they do, except that…if we could dig them all out, scientists now believe the pile would be as big as all the other life on Earth combined – a mountain of microbes as big as all the plants and animals from land and sea…as big as all the life on Earth we knew about before we started digging.

So don't be surprised if we break open a few rocks and do some digging on Mars. After all, we just discovered half of all the life on Earth…is living inside the Earth.

Relevant NSES Standards

NSES Content Standard A: Understanding about scientific inquiry.
- (Grades K-4) Scientific investigations are based on evidence.
- (Grades 5-8) Scientists develop new technologies to collect evidence.
- (Grades 9-12) Accuracy of data can depend on the tools used.

NSES Content Standard C: Life science.
- (Grades K-4) Different environments support different types of organisms.
- (Grades 5-8) Identifying different types of organisms.
- (Grades 9-12) Organisms have filled every available niche on earth (including rocks).

NSES Content Standard D: Earth and space science.
- (Grades K-4) Objects in the sky. Planets.
- (Grades 5-12) Structure of the earth; life hiding below the surface.

NSES Content Standard E: Understanding about science and technology.
- (Grades 5-8) New technology can lead to new discoveries.
- (Grades 9-12) New technology can introduce new areas of research.

NSES Content Standard F: Science in social perspectives.
- (Grades 5-12) Society's interest can direct scientific inquiry.

NSES Content Standard G: History and nature of science.
- (Grades K-8) Science is not finished; much more remains to be understood.
- (Grades 5-12) Science can change as new evidence becomes available.

Credits: Dr. M. Sean O'Brien, Hubble Space Telescope; Dr. Michael Meyer, Astrobiologist, NASA